

Program Report to the Governor

“The Effectiveness of Indiana’s Capacity Development Strategy For Existing Public Water Systems”

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Background

The 1996 Amendments to the Safe Drinking Water Act emphasize the prevention of contamination of water supplies and encourage the proper management of public water systems to ensure the delivery of safe drinking water to all citizens. The Amendments required states to develop and implement a strategy that will assist public water systems in acquiring and maintaining water system capacity. Water system capacity is the ability to plan for, achieve, and maintain compliance with applicable drinking water standards. Water system capacity has three components: technical, managerial, and financial. Proficiency in all three areas is necessary for a system to have adequate “capacity.” The process in assisting systems to acquire and maintain adequate technical, managerial, and financial capacity is called Capacity Development. The goal of our Capacity Development efforts is ensuring that public water systems in Indiana will maintain high compliance rates and consistently provide safe drinking water to their customers.

Introduction

The Indiana Department of Environmental Management (IDEM) submitted our “Capacity Development Strategy for Existing Public Water Systems” to EPA on July 28, 2000. The IDEM utilized the experience and expertise of stakeholders both within and outside the agency to develop this strategy. Those involved in drafting Indiana’s strategy for existing public water systems included representatives from public water supplies, law firms, contractors, consulting firms, EPA, drinking water associations, IDEM, and other state agencies. Indiana’s strategy involves a variety of activities and tools designed to enhance the technical, managerial, and financial capacity of our public water supplies. EPA approved our strategy for existing systems on September 14, 2000.

IDEM, with input from stakeholders both within and outside the agency, also developed a new regulation (327 IAC 8-3.6) that governs the development of new community and nontransient noncommunity public water supplies in Indiana. As of September 9, 1999, all new¹ community or new nontransient noncommunity public water supplies in Indiana must submit a water system management plan (WSMP) to IDEM that demonstrates the technical, managerial, and financial capacity of the proposed public water supply. IDEM must approve the water system management plan, prior to the submission of a construction permit application by the proposed public water supply. If IDEM receives a construction permit application before the water system management plan is approved, the application is returned to the proposed system.

By September 30, 2002, IDEM must submit the first report to the Governor regarding the effectiveness of our Capacity Development strategy for existing public water systems to avoid a withholding of up to 20% of the Drinking Water State Revolving Fund (DWSRF) allotment for

¹ Indiana’s Capacity Development Rule for New Public Water Supplies defines a “new public water supply system” as a community water supply (CWS) or nontransient noncommunity water supply (NTNC) system that is newly constructed and will commence operation after October 1, 1999; a CWS or NTNC that has not previously met the definition of a public water supply, but will have expanded infrastructure after October 1, 1999 to meet the definition of a public water supply; or a CWS or NTNC that currently meets the definition of a public water supply and expands its infrastructure after October 1, 1999, and the expansion results in a change of classification to a CWS or NTNC water supply. See 327 IAC 8-3.6-1(3) for the complete definition.

Federal Fiscal Year 2003. This document serves to fulfill the reporting requirement for Indiana's Capacity Development Report to the Governor on the effectiveness of our strategy for existing public water systems.

Objectives

Our objectives in implementing the strategy are to improve the overall compliance rates for existing public water systems which will ensure safe drinking water for the citizens of Indiana. Over the last two years, the IDEM has successfully implemented several activities and developed several tools to assist public water supplies in attaining technical, managerial, and financial capacity.

Current Activities and Tools to Enhance Water System Capacity

Since the implementation of our "Capacity Development Strategy for Existing Public Water Systems" we have focused on developing mechanisms to screen, categorize, and prioritize systems in order to focus our efforts on systems in need. As we continue to provide assistance to public water supplies, we are constantly exploring new tools that will further enhance the technical, financial, and managerial aspects of existing public water supplies. The following activities and tools were developed to enhance the technical, managerial, and financial capacity of systems in Indiana. A more detailed description of these items are included below.

- ◆ Screening, Categorizing, and Prioritizing Systems
- ◆ Compliance Assistance Tools
- ◆ On-site Technical Assistance
- ◆ Self-Assessment Manual
- ◆ Circuit Rider Contracts
- ◆ Drinking Water Help Line
- ◆ IDEM Drinking Water Guidance Manual
- ◆ Small System Technical Assistance Workshops
- ◆ Bimonthly SNC Meetings
- ◆ Water & Wastewater Task Force
- ◆ Operational Rules
- ◆ Small System Sampling Program
- ◆ New Operator Certification Rule

Progress Toward Improving Existing System Capacity

Screening, Categorizing, and Prioritizing Systems

IDEM continues to focus on developing mechanisms to screen, categorize, and prioritize systems to determine the need for improved technical, managerial, and financial capacity. Databases from inside and outside of the agency were analyzed to determine what information

was readily available and applicable to assess the technical, financial, and managerial capacity of all public water supplies in Indiana. As we expected, the databases within our agency are more accessible and contain the most complete and applicable information regarding public water supplies. So far our primary screening tool has been our Compliance Database. It was used to determine which systems we targeted for our Small Systems Sampling Program. Our Compliance Database is also an important tool for determining where compliance assistance is needed. However, data from the Indiana Utility Regulatory Commission (IURC) and the complaints database from the Indiana Office of the Utility Consumer Counselor (OUCC) have provided some additional financial and managerial data that is not available within IDEM. Since the inception of our Capacity Development Strategy for Existing Systems, IDEM has targeted over four hundred (400) public water systems that may be deficient in technical, managerial, and/or financial capacity.

Compliance Assistance Tools

Compliance assistance tools utilized by the IDEM Drinking Water Branch (DWB) have been very effective in promoting compliance among all public water supplies, even before the development of the capacity development strategy. Some of the tools that we use are:

- ✓ Courtesy Reminder Letters (sent prior to the end of a compliance period)
- ✓ Reminder Letters (sent immediately following the end of a compliance period)
- ✓ Violation Letters
- ✓ Courtesy Phone Calls to Systems
- ✓ On-site Assistance by Field Inspection Staff or Circuit Rider
- ✓ Monitoring Waiver Program (system specific monitoring schedule spreadsheets)
- ✓ Educational Materials and Reminders of New Rule Requirements
- ✓ Seminars and Workshops with Water Associations

On-site Technical Assistance

Technical assistance is critical in promoting compliance among systems that have maximum contaminant level violations or operational problems. The IDEM DWB field inspectors provide on-site technical assistance to address a wide variety of operational problems. They also assist systems in the identification of potential sources of contamination and provide guidance on the remediation of contaminants in the drinking water. In State Fiscal Year 2002, the DWB field inspectors provided on-site technical assistance to approximately five hundred and sixty (560) public water systems. On-site technical assistance has always proven to be an extremely effective activity in reducing noncompliance rates and improving water quality among public water supplies in Indiana.

Self-Assessment Manual

The IDEM DWB recently developed a self-assessment manual that assists existing public water systems in obtaining a clearer picture of their technical, managerial, and financial needs (see appendix A). We also utilize the self-assessment manual as a tool to understand the improvements needed in the operation, maintenance, and management of a public water supply. The self-assessments are not only intended to help the public water supply get a clearer picture of their needs, but are also used by the DWB to determine additional tools that we can develop that will encourage water system capacity. The use of the manual is in the initial phase. The majority of comments we have received from the limited number of operators that have completed the manual indicate that it is a useful tool in revealing technical, managerial, and/or financial deficiencies in their systems.

Circuit Rider Contracts

The IDEM utilized part of the small system technical assistance set-aside funds to contract a circuit rider through the Indiana Rural Water Alliance (The Alliance). The circuit rider was a certified operator who provided on-site technical assistance to existing public water supplies. The services included assistance with operational issues, consumer confidence report development, monitoring waiver application completion, public notification follow-up, and sampling technique assistance. Approximately three hundred fifty five (355) systems were assisted by the circuit rider during the term of the contract. These systems were selected for assistance by using our database to target systems in noncompliance with specific rules such as the Consumer Confidence Report requirements.

Again the IDEM will utilize part of the small system technical assistance set-aside funds to contract a circuit rider through the Indiana Community Action Association (ICAA). The ICAA will provide a full time circuit rider to assist systems that we have prioritized as needing technical, managerial, and/or financial assistance. This circuit rider will focus primarily on managerial and financial issues. The on-site assistance will include but is not limited to, one-on-one training in accounting, bookkeeping, cash flow, budgets, billing, financial planning, and capital improvement planning. The circuit rider will also assist systems in the evaluations of rate ordinances and encourage the consolidation or regionalization of systems incapable of maintaining adequate technical, managerial, and/or financial capacity. We plan to have this circuit rider on the road and visiting targeted systems by the fall of 2002.

Drinking Water Help Line

Set-aside funds were utilized to establish and maintain a toll free “help line” to assist public water supplies with questions regarding operation and maintenance of their water system facilities. A contract was established with the Indiana Rural Water Association (IRWA) and the American Water Works Association (AWWA) - Indiana Section, to operate and maintain the line. The help line receives a variety of calls from public water systems, consultants, state

agencies, and the public. Approximately 6 (six) to 10 (ten) calls per month were recorded since the line was established in October of 2000. We renewed this contract on September 14, 2001, for one more year. Although the numbers of calls were not as high as originally expected, those that have utilized the help line have found it to be very beneficial. Based on further review of the number of calls received, this contract will not be renewed.

IDEM Drinking Water Guidance Manual

A contract was established with the IRWA and AWWA to develop a comprehensive drinking water guidance manual for community and nontransient noncommunity public water supplies. The guidance manuals are currently in the final development stage. The guidance manuals will contain information regarding the Safe Drinking Water Act, Indiana's public water supply regulations, sampling methods, monitoring requirements, upcoming regulations, and operation and maintenance issues. It is anticipated that the drinking water guidance manuals will be used in conjunction with the small system technical assistance workshops for community and nontransient noncommunity public water supplies. When completed, we expect the guidance manuals to be a valuable source of information to owners and operators of public water supplies in Indiana.

Small System Technical Assistance Workshops

IRWA and AWWA have also been contracted to develop and present a series of workshops to assist small transient, nontransient, and community public water supplies. To encourage water system attendance, the workshops are offered in various locations throughout the State and some are offered in the evening. The workshops are planned such that interested water system owners and/or operators are within a one-hour drive from a workshop location. The workshops are designed to follow the drinking water guidance manual and include topics such as the highlights of the Safe Drinking Water Act, Indiana's public water supply regulations, sampling methods, monitoring requirements, and operation and maintenance issues. IDEM developed an easy to follow manual for transient systems that covers major compliance and operational issues. The manual is given out at the training session. To date, twenty-four (24) transient workshops have been held with approximately two hundred eight (208) public water supplies attending (see appendix B). The manual is also being individually distributed to all transients systems as part of performing source water assessment data collection at the systems. During 2003 the contractor will begin a series of twelve (12) workshops targeted toward community and nottransient systems. An overwhelming majority of the attendees have indicated that the workshops were very valuable in helping them to understand Indiana's public water supply regulations.

Bimonthly Significant Noncompliers (SNC) Meetings

Representatives from the IDEM Drinking Water Branch, the IDEM Office of Enforcement, the IDEM Office of Legal Council, and USEPA Region 5 meet bimonthly to

discuss systems that are considered significant noncompliers. The meetings provide a forum for staff to provide updates and exchange information regarding the status of compliance assistance efforts, technical assistance efforts, enforcement referrals, and compliance with orders. The bimonthly SNC meetings help to keep the focus on systems that are having problems and drives the process towards achieving compliance or moving on to more formal enforcement measures in a judicious manner. Also, these meetings have improved communications between the IDEM and the USEPA Region 5 compliance and enforcement staff which has resulted in systems returning to compliance in a more timely manner.

Water and Wastewater Task Force

Representatives from IDEM, the Indiana Utility Regulatory Commission, the Indiana Office of the Utility Consumer Counselor, and the Indiana State Department of Health meet on a quarterly basis to discuss issues with public water supplies that may extend between the agencies. The meetings have proven helpful to bring attention to public water systems that may be having problems and improve communication between the agencies to focus on solutions for the water systems.

Operational Rules

The IDEM is in the process of developing rules that specifically deal with the operation and maintenance of public water systems. The need for "operational" rules was identified in the development of the State's Strategy. The State currently has very few operational requirements specified in rule or statute. The purpose of this rulemaking is to establish a rule to require standards of operation and corrections to water treatment plant and distribution system operations prior to any situation becoming so critical as to affect human health. Without rules to require proper operation of water treatment plants and distribution systems, Indiana has often not been able to act in any meaningful way to citizen complaints that stem from improper operations relying instead upon non-rule policies which are unenforceable documents. Having only unenforceable policies has resulted in past situations becoming drinking water emergencies before a satisfactory solution could be achieved. We believe that these rules will complement our water system capacity efforts.

Small System Sampling Program

Historically, small systems have taken up the majority of our noncompliance and enforcement efforts. In the past, noncompliance rates for monitoring and reporting were approximately 40-45% for small systems. Beginning in July 2002, the IDEM DWB and the Indiana State Department of Health partnered together to provide the required bacteriological and nitrate samples free of charge to community, nontransient, and transient public water systems serving a population of 100 or less. This is a voluntary program. To date, approximately 2,200 system out of approximately 2,400 systems have opted to participate in the program. We believe that the small system sampling program will have a tremendous impact in

lowering the noncompliance rates among small water supplies especially the small transient systems.

New Operator Certification Rule

The new operator certification rule became effective December 2000. The new rule requires all community and nontransient noncommunity public water supplies to be under the direct supervision of a certified water system operator. The new rule provides a classification for small water systems that the old rule did not include. Since the new rule became effective, an additional eight hundred (800) small public water systems are now under the supervision of a certified operator. We have received applications from 1,500 applicants requesting to be a grandparent operator. Not only does this rule add another level of public health protection to consumers but will also lower the noncompliance rates of those systems involved. IDEM will apply for the Operator Certification Expense Reimbursement Grant. The grant funds will be used to train grandparent operators.

Challenges To Capacity Development

There are challenges to fully implementing the Capacity Development Strategy that limit the effectiveness of the compliance and enforcement tools used to promote capacity among public water supplies. There is a need to provide additional resources specifically targeted towards Capacity Development. The resources could be in the form of additional staff or contract assistance. IDEM reached agreement with the State Budget Agency in 2002 on the annual use of \$ 1,000,000 in DWSRF Set-Aside funds to support the Drinking Water Program. A significant portion of these funds are directed to activities that support the Capacity Development Strategy. Additionally, a bill was introduced in the 2002 General Assembly that would raise \$2,000,000 in fees for the Drinking Water Program. The legislation was not passed during the session. IDEM plans to work with the Environmental Quality Service Council, an interim legislative study committee this fall, to outline the need for additional public water supply resources. The IDEM recognizes that adequate resources are a key element in making our strategy a success

Efficacy of Capacity Development Strategy

We believe our initial Capacity Development efforts have been effective in improving the technical, managerial, and financial capacity of public water systems in Indiana. Although it is still early for definitive measures, initial results from our small systems sampling program are very positive and should improve compliance considerably. We believe that noncompliance rates among other targeted systems will also continue to fall. The positive feedback we have received from water supplies on the workshops, help line, self-assessment manual, etc. indicates that we are heading in the right direction. Our Partnership with the Indiana State Department of Health and excellent working relationships with the IURC and OUCC has reinforced our efforts in improving public water system capacity. The new operator certification rule and new

operational rules will also have a positive impact on improving compliance rates and assuring drinking water quality in Indiana. Ongoing implementation of Indiana's Capacity Development Plan for Existing Public Water Supplies and continued support for resources to the drinking water program will further improve the compliance status of all public water supplies in the future. Our intent is to provide assistance to systems before they become significant noncompliers, thus eliminating the extra effort of compliance and enforcement staff to improve the compliance status of these systems. Through our new rules and forward looking activities, Indiana is laying a strong foundation of support for public water supplies to improve their technical, managerial, and financial capacity. We will continue to concentrate our Capacity Development efforts among deficient systems to ensure that they achieve high compliance rates and deliver safe drinking water to their customers.

IDEM will make this report available through its website at [Access Indiana](#).

Appendix A

Self-Assessment Manual for Existing Public Water Systems

Appendix B

Small System Technical Assistance Workshops